Web 2.0 – The Web's Edge

Instructor Teresa Pelkie

Software as a Service (SaaS) – Class # 13 Chapter 5.3

Salesforce.com, a leader in SaaS, teams up with Google Apps

What is Software as a Service (SaaS)?

Software as a Service (SaaS) is a software distribution model in which applications are hosted by a vendor or service provider and made available to customers over a network, typically the Internet. These applications are hosted online are accessed from a web browser, while the software and data are stored on the servers.

SaaS software vendors may download the application to the consumer device, disabling it after use or after the on-demand contract expires. The software company provides maintenance, daily technical operation and support for the software for their client.

- A popular way to run and pay for software
- Use the software provided by the SaaS provider instead of installing your own
- Instead of paying for the software itself and related fees, you pay on a subscription or time related basis
- You use the software through a web interface (website) that loads in the browser
- Customer Relationship Management (CRM) is the most popular form of SaaS
- Word processors, spreadsheets and project management applications are other popular SaaS uses

SaaS can be grouped into two major categories:

1. Applications or business solutions offered to companies and enterprises, and sold or made available to these enterprises on a subscription basis. Applications covered under this category include Customer Relationship Management (CRM) and Project Management software.
    a. SalesForce: www.SalesForce.com – the leader in CRM and SaaS
    b. Zoho Office: www.zoho.com
    c. Intuit QuickBase: http://quickbase.intuit.com
    d. Windows Azure - www.microsoft.com/azure/
    e. Amazon Web Services – http:// aws.amazon.com

2. Customer-oriented services which are offered to the general public either on a subscription basis or (more often than not) offered for free but are supported by advertising. Web-based email services such as those cited above fall into this general category.
    a. Gmail, Hotmail, Yahoo Mail

b. Google Docs and Spreadsheets and Google Apps – http://docs.google.com – www.google.com/a

Web 2.0 technologies that have made SaaS possible

- Service Oriented Architecture (SOA) – rather than writing the same procedures again and again, software developers create “services” which can be re-used. Services are modularly assembled and easily reconfigured software components that can be combined to form a complete process.
- Web Services – are the framework by which services are published, discovered and provided.
- Rich Internet Applications (RIA), such as Flash and Ajax, bring the functionality of the desktop application to the Internet or Web application.
- Mash-ups and widgets

Traditional software

Traditionally, the user purchases a software package and license by paying a one-time fee. The software thereby becomes the property of the user who made the purchase. Software support and updates are provided by the vendor or developer under the terms of the license agreement. In most business settings, it is the cost of the software, the user licenses and the yearly upgrades that are a major expense.

- Managed on premise by the company
- Installed on individual computers
- Supported by IT department
- Difficult to use
- Costly to maintain
- Expensive infrastructure

traditional software

Software as a Service

SaaS

SaaS, on the other hand, does not have licenses. Rather than a single fee, payment for the use of software is through subscription, or a onetime fee, such as a yearly fee. The user's access and use of the software ends when he stops paying subscription fees. Moreover, the software is not downloaded to the user's computer. Because there is not initial investment in software or hardware, business can save money.

For example, G-Mail or Hotmail is not "resident" on your computer - you access and use it through the Internet but it is not loaded and stored onto your computer.

- Available across the Internet as a service
- Can be used on the computer, Web and other mobile devices

SaaS utilizes “Cloud Computing”

Cloud computing is a computing paradigm in which tasks are assigned to a combination of connections, software and services accessed over the Internet. This network of servers and connections is collectively known as "the cloud.”

Advantages of SaaS for the consumer

- Reduction in software and hardware costs
- Automatic updates and fixes
- Smaller storage requirements
- Documents are available to all
- Less IT personnel needed to maintain hardware and software

Advantages of SaaS for the application provider

- Can deliver services to many consumer
- The software is improved the more it is used
- APIs can allow the consumer to customize their applications

Looking ahead

The idea of using software via the Internet started with Application Service Provisioning (ASP) in the mid 1990s. This model never reached success due to the still primitive nature of the Web, lack of computing power and limited bandwidth. Another reason why it failed, was that these providers worked exclusively with large business and charged high fees.

Due to the emergence of the Web 2.0 technologies, it appears that software applications that traditionally ran on the desktop, can now run on the Web. This adds another view to the term “the Web as the platform”.

We are also beginning to see the development of desktop applications that can tap into the Web, and Web applications that can be used offline, which all takes us away from traditional desktop application use.